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# Program

Friday, December 17

## I1: Invited Technical Papers

### ***Architectural Support for Internet Evolution and Innovation***

Rudra Dutta (North Carolina State University, USA); Ilia Baldine (RENCI (Renaissance Computing Institute) & UNC Chapel Hill, USA); Anjing Wang (Ericsson, USA); Mohan Iyer (Oracle Corporation, USA); George N. Rouskas (North Carolina State University, USA)  
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### ***Protection Costs of a Fully Connected IP Core Network Over a WDM Ring***

Ćiril Rožić (University of Hawaii, USA); Galen Sasaki (University of Hawaii, USA)  
pp. 4-6

### ***Silicon-based Devices for Computer Interconnects***

Lech Wosinski (Royal Institute of Technology, Sweden); Zhechao Wang (Royal Institute of Technology, Sweden)  
pp. 7-9

### ***Green Lightpath Provisioning in Transparent WDM Networks: Pros and Cons***

Pawel Wiatr (KTH Royal Institute of Technology, Sweden); Paolo Monti (The Royal Institute of Technology (KTH), Sweden); Lena Wosinska (Royal Institute of Technology KTH, Sweden)  
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Saturday, December 18

## S1: High Speed Networks

### ***A Multi-Path Routing Scheme for GMPLS-Controlled WDM Networks***

Rabindra Ghimire (University of Arkansas at Little Rock, USA); Seshadri Mohan (University of Arkansas at Little Rock, USA)  
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### ***An Empirical Model of Power Consumption in the NetFPGA Gigabit Router***

Arun Vishwanath (University of New South Wales, Australia); Zhi Zhao (University of New South Wales, Australia); Vijay Sivaraman (University of New South Wales, Australia); Craig L Russell (CSIRO, Australia)  
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***A Heuristic for Combined Protection of IP Services and Wavelength Services in Optical WDM Networks***

Chaitanya S. K. Vadrevu (University of California, Davis, USA); Massimo Tornatore (Politecnico di Milano & University of California, Davis, Italy); Chin Guok (Energy Sciences Network, USA); Inder Monga (Energy Sciences Network, USA)

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***Dynamic Circuits with Lightpath Switching over Wavelength Routed Networks***

Neal Charbonneau (The MITRE Corporation, USA); Vinod M. Vokkarane (University of Massachusetts Dartmouth, USA)

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***Hybrid All-Optical Networks: Routing and Wavelength Assignment***

Shivashis Saha (University of Nebraska-Lincoln, USA); Chandra Nelapatla (University of Nebraska Lincoln, USA); Jitender Singh Deogun (University of Nebraska-Lincoln, USA)

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***Performance Analysis of Dynamic Bandwidth Allocation Algorithms for Long-Reach PONs***

Neeharika Jana (Indian Institute of Technology Madras, India); Ganesh Chennimalai Sankaran (Indian Institute of Technology Madras & HCL Cisco Offshore Development Center, India); Krishna M. Sivalingam (Indian Institute of Technology Madras, India); Gerard P. Parr (University of Ulster, United Kingdom)

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## **S2: Network Applications**

***New Link Addition Strategies for Multi-Gateway Small World Wireless Mesh Networks***

Aditi Verma (University of Mumbai, India); Chetan Verma (UC San Diego, USA); Bheemarjuna Reddy Tamma (University of California, San Diego, USA); Manoj Bs (Indian Institute of Space Science and Technology & California Institute of Telecommunication and IT, India)

pp. 31-33

***IdP proxy for combined authentication based on multiple IdPs***

Tadashi Kaji (Hitachi, Ltd., Japan)

pp. 34-36

***On Capturing Spatio-temporal Factors in Cognitive Network Channel Selection***

Joshal A Daftari (University of California, San Diego, USA); Bheemarjuna Reddy Tamma (University of California, San Diego, USA); Manoj Bs (Indian Institute of Space Science and Technology & California Institute of Telecommunication and IT, India); Ramesh Rao (University of California at San Diego, USA)

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***Symbiotic Computing***

Akshay Singh (Yahoo! Software Development Center, India); Ravi Chandra (Yahoo! Software Development Center, India)

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**S3: Core Networks*****Evaluation of Post-Fault Restoration Strategies in Multi-Domain Networks***

Feng Xu (University of New Mexico, USA); Tamal Dinesh Das (Indian Institute of Technology, Bombay, India); Min Peng (Wuhan University, P.R. China); Nasir Ghani (University of New Mexico, USA)

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***Mixed-Line-Rate (MLR) Optical Network Design with Wavebanding***

Sifat Ferdousi (University of California, Davis, USA); Avishek Nag (University of California Davis, USA); Abu Ahmed S. Reaz (University of California, Davis, USA)

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***Alternate Carrier Ethernet Technology - The Omnipresent Ethernet Demonstration***

Ashok Verma (IIT Bombay, India); Saurabh Mehta (Indian Institute of Technology, Bombay, India); Ashwin A Gumaste (Indian Institute of Technology, Bombay, India)

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***A Hybrid WDM/TDM PON Architecture Using Wavelength Selective Switches***

Goutam Das (University of Ghent & IBBT, Belgium); Bart Lannoo (Ghent University - IBBT, Belgium); Didier Colle (IBBT - Ghent University, Belgium); Mario Pickavet (Ghent University, Belgium); Piet Demeester (Ghent University, Belgium)

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***Constructing Min-cost Single Failure Immune Recovery Trees: Computational Complexity and Approximation Algorithms***

Xi Fang (Arizona State University, USA); Dejun Yang (Arizona State University, USA); Guoliang Xue (Arizona State University, USA); Krishnaiyan Thulasiraman (University of Oklahoma, USA)

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***Excess-Capacity-Aware, Shared-Path Protection with Backup Reprovisioning in Telecom Mesh Networks***

Ferhat Dikbiyik (U. C. Davis, USA); Laxman Sahasrabuddhe (N/A, USA); Massimo Tornatore (Politecnico di Milano & University of California, Davis, Italy)

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## PS: Poster Session

### ***Pre-computation Based Heuristic for Inter-Domain QoS Routing***

Ahmed Frikha (INRIA/IRISA - University of Rennes 1, France); Samer Lahoud (IRISA, University of Rennes 1, France)

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### ***Cipher-Text Classification with Data Mining***

Pejman Khadivi (Isfahan University of Technology, Iran); Marjan Momtazpour (Isfahan University of Technology, Iran)

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### ***Xpec: A Cross-Layer Spectrum Assignment in Cognitive Radio Networks***

Berk Canberk (Istanbul Technical University, Turkey); Sema Oktug (Istanbul Technical University, Turkey)

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### ***Particle Swarm Optimization for Optimal Allocation of Wavelength Converters in WDM Optical Networks***

Kaushik Chakraborty (Jadavpur University, India); Aveek Chakrabarti (Jadavpur University, India); Aankan Mullick (Jadavpur University, India); Mrinal Kanti Naskar (Jadavpur University, India); Amitava Mukherjee (IBM India Pvt Ltd, Calcutta, India)

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### ***A Cost-efficient Algorithm for Finding Connected Dominating Sets in Static Wireless Ad Hoc Networks with Obstacles***

Abhishek Raj (Tata Consultancy Services Limited, India); Debashis Saha (Indian Institute of Management (IIM)- Calcutta, India); Parthasarathi Dasgupta (Indian Institute of management Calcutta, India)

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### ***On the Data Services of Secondary User with Primary Exclusive Region***

Sumit Kundu (N.I.T Durgapur, India); Sanjay Dhar Roy (National Institute of Technology Durgapur, India)

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### ***Multiple-Gateway Deployment for Wired/Wireless Converged Access Networks***

Ming Xia (Ericsson Research US, USA)

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### ***Performance evaluation of TCP Reno and Vegas over different routing protocols for MANETs***

Ibrahim Tabash (Aligarh Muslim University, India); Nesar Ahmad (A.M.U. Aligarh, India); Salim Beg (Aligarh Muslim University, India)

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### ***Fiber to the Antenna: A Step towards Multimode Radio Architectures for 4G Mobile Broadband Communications***

Georgios Kardaras (Technical University of Denmark, Denmark); Jose Soler (Technical University of Denmark, Denmark); Lukasz Brewka (Technical University of Denmark, Denmark); Lars Dittmann (Technical University of Denmark, Denmark)

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***Adaptive Distance Estimation and Localization in Wireless Networks with Triangle and Ptolemy Inequalities***

Pejman Khadivi (Isfahan University of Technology, Iran)  
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***Performance of Layered CDMA Wireless Sensor Networks with Space Diversity in Presence of Correlated Interferers***

Uma Datta (Central Mechanical Engineering Research Institute, India);  
Pradyumna Kumar Sahu (Central Mechanical Engineering Research Institute, India); Sumit Kundu (N.I.T Durgapur, India)  
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***Crosstalk-Aware Anycast Routing and Wavelength Assignment in Optical WDM Networks***

Balagangadhar G Bathula (Columbia University, USA); Jeremy Plante (University of Massachusetts Dartmouth, USA); Vinod M. Vokkarane (University of Massachusetts Dartmouth, USA)  
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***The Reliability of the Interconnection Networks Through Self Generating Disjoint Minimal Cut-Set Method***

Pradyumna Tripathy (Silicon Institute of Technology, Bhubaneswar, India);  
Ranjan Dash (College of Engineering & Technology, Bhubaneswar, India);  
Chitta Tripathy (VSS University of Technology, Burla, India)  
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***Adaptive MMSE-MRC Multiuser Detector with Mixed Phase Channel for DS-CDMA System***

Mangala Ramrao Gajbhiye (National Institute of Technology, Rourkela, India);  
Jitendriya Satapathy (National Institute of Technology, Rourkela, India)  
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